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UNITED STATES PATENT AND TRADEMARK OFFICE

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BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES

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*Ex parte* RICHARD HULL, PAUL JOHN MARSH,  
and JOSEPHINE REID

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Appeal 2009-003130  
Application 10/635,925<sup>1</sup>  
Technology Center 2600

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Decided: August 6, 2009

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Before KENNETH W. HAIRSTON, ROBERT E. NAPPI,  
and MARC S. HOFF, *Administrative Patent Judges*.

HOFF, *Administrative Patent Judge*.

DECISION ON APPEAL

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<sup>1</sup> The real party in interest is Hewlett-Packard Development Company, L.P.

### STATEMENT OF CASE

Appellants appeal under 35 U.S.C. § 134 from a Final Rejection of claims 1-7, 9-22, and 24-30.<sup>2</sup> We have jurisdiction under 35 U.S.C. § 6(b).

We reverse.

Claims 1-7, 9-22, and 24-30 stand rejected under 35 U.S.C. § 112, second paragraph. We have reversed the rejection of claims 1-7, 9-13, 16-22, and 24-28 under 35 U.S.C. § 112, second paragraph, because we conclude that the claims are not indefinite for the reasons given by the Examiner.

While the Examiner's reasoning is applicable to claims 1-7, 9-13, 16-22, and 24-28, however, on its face the reasoning provided is not applicable to claims 14, 15, 29, and 30. Therefore, with the exception of a simple conclusion that claims 14, 15, 29, and 30 are indefinite, the rejection is *totally silent* as to these claims. The Examiner has *failed to provide any reason* why claims 14, 15, 29, and 30 should be considered indefinite. We conclude that the Examiner's rejection of claims 14, 15, 29, and 30 is without any support and is thus erroneous on its face. Even though Appellants have *not alleged an error* in that no support whatsoever was provided by the Examiner for the conclusion, we have *reversed* the rejection of claims 14, 15, 29, and 30 under 35 U.S.C. § 112.

Appellants' invention relates to a method for retrieving a data item to a mobile device carried by a user visiting a real-world space such as an exhibition hall. In one embodiment, the method specifies that the user's mobile device will attempt to retrieve the data item from another mobile device before requesting the data item from the (central) service system

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<sup>2</sup> Claims 8, 23, 31, and 32 have been cancelled.

(Spec. 1-2). The service system is disclosed as keeping ongoing records of those mobile devices holding, or likely to be holding, the requested data item (Spec. 44-45).

Claim 1 is exemplary:

1. A method of retrieving a data item to a mobile device carried by a first user visiting a real-world space, the data item being available from a service system to mobile devices of users visiting the space, the method comprising:

(a) keeping a record on an on-going basis of which mobile devices in said space, if any, hold or are likely to be holding the data item;

(b) seeking to retrieve the data item to the first user's mobile device by requesting transfer only from mobile devices that, according to said record, hold or are likely to be holding the data item; and

(c) in the event that (b) is unsuccessful, retrieving the data item to the first user's mobile device by transfer from the service system.

No prior art is relied upon by the Examiner in rejecting the claims on appeal.

Throughout this decision, we make reference to the Appeal Brief (“Br.,” filed January 20, 2008) and the Examiner’s Answer (“Ans.,” mailed March 18, 2008) for their respective details.

## ISSUE

Appellants argue that the scope of the claims is not unascertainable in the absence of numerical bounds on “likelihood” in the context of the claim limitation “likely to be holding” (Br. 4). In Appellants’ view, there is no requirement for a hard numerical range to be specified, and one of ordinary skill in the art would understand the meaning of the phrase from the

Specification (Br. 5). In response, the Examiner asserts that the phrase “likely to be holding the data item” is subject to interpretation such that it cannot be determined whether or not a mobile device is or is not holding the data item (Ans. 5-6).

The contentions of Appellants and the Examiner thus present us with the following issue:

Have Appellants shown that the Examiner erred in concluding that the scope of the claimed invention is unascertainable due to the absence of a quantification of “likelihood” in the claimed phrase “likely to be holding”?

## FINDINGS OF FACT

The following Findings of Fact (FF) are shown by a preponderance of the evidence.

### *The Invention*

1. According to Appellants, the invention concerns a method for retrieving a data item to a mobile device carried by a user visiting a real-world space such as an exhibition hall. In one embodiment, the method specifies that the user’s mobile device will attempt to retrieve the data item from another mobile device before requesting the data item from the (central) service system (Spec. 1-2).

2. Appellants disclose that the server (“service system”) may keep a record of the devices to which it has served each item in an immediately preceding time window (Spec. 45).

3. The record may be supplemented by information about the device-to-device transfers of items, wherein the sending or receiving device

can be required to inform the item server about such a transfer, including the time it was done (Spec. 45).

4. The record may be further supplemented by having devices inform the server whenever they delete an item from cache (Spec. 45).

5. Another approach would be to have each mobile device regularly report what feature items are present in its cache (Spec. 45).

6. If all devices identified as likely to be holding the data item have been contacted and all have responded negatively (or not at all), the requesting device determines that it must ask for the item from the item server. The item server, on receiving such a request, responds by sending back the item (Spec. 44).

*Dictionary definition of “likely”*

7. “Likely” is defined as “[h]aving a chance of happening or being true” (Br. 4 (citing THE AMERICAN HERITAGE DICTIONARY OF THE ENGLISH LANGUAGE (4th ed. 2007))).

## PRINCIPLES OF LAW

The test for definiteness under 35 U.S.C. § 112, second paragraph, is whether “those skilled in the art would understand what is claimed when the claim is read in light of the specification.” *Orthokinetics, Inc. v. Safety Travel Chairs, Inc.*, 806 F.2d 1565, 1576 (Fed. Cir. 1986). Claims must “particularly point[] out and distinctly claim[] the subject matter which the applicant regards as his invention.” 35 U.S.C. § 112. However, “[o]nly claims not amenable to construction or insolubly ambiguous are indefinite. A claim term is not indefinite just because it poses a difficult issue of claim construction.” *Star Scientific, Inc. v. R.J. Reynolds Tobacco Co.*, 537 F.3d

1357, 1371 (Fed. Cir. 2008) (citations omitted) (internal quotation marks omitted). “Thus, the definiteness of claim terms depends on whether those terms can be given any reasonable meaning.” *Datamize, LLC v. Plumtree Software, Inc.*, 417 F.3d 1342, 1347 (Fed. Cir. 2005).

## ANALYSIS

### CLAIMS 1-7, 9-13, 16-22, AND 24-28

The Examiner concludes that the claims are indefinite because the phrase “likely to be holding,” found in each independent claim, renders the scope of the claim unascertainable. According to the Examiner, the phrase “likely to be holding” renders the claim indefinite because the mobile device is not necessarily holding any data item, and because the Specification does not specify *how* likely it is that the mobile device is holding the data item (Ans. 4).

Appellants provide a dictionary definition of “likely,” agreed upon by the Examiner, as “[h]aving a chance of happening or being true” (FF 7). The Examiner further construes that definition to mean that “the mobile device might or might not hold the data item or the mobile device probably holds the data item, but it is unnecessary that the mobile device does actually hold the data item” (Ans. 5). The Examiner insists that without “criteria [and/or] conditions both in the specification and in the claim language that [specify] how ‘likely’ is considered as likely to be holding the data item” (Ans. 5), one having ordinary skill in the art “would not be able to conceptualize or be able to decide for themselves, without undue experimentation, how likely they want a mobile device to be considered as likely to be holding data item” (Ans. 5-6).

We are not persuaded that the scope of the claims is unascertainable. First, we disagree with the Examiner that “likely to be holding” may be construed to mean that the probability of the mobile device holding the data item could be equal to zero (Ans. 7). The definition of “likely” (FF 7) precludes this possibility, in that something “[h]aving a chance of happening or being true” must have some non-zero chance of happening or being true; otherwise, the event has *no* chance of happening or being true. Second, we disagree with the Examiner’s finding that the language of claim 10 does not support Appellants’ argument. Appellants point out that claim 10 recites that the on-going record keeping originally recited in claim 1 further comprises at least one of “periodically making an inventory of items currently held by each mobile device; and recording incremental changes to the inventory of each mobile devices as items are added/removed.” The Examiner finds that claim 10 “does not recite said on-going record keeping of which mobile devices are likely to be holding the data item” (Ans. 6 (emphasis omitted)). Claim 10, however, depends from claim 1, which itself recites “keeping a record on an on-going basis of which mobile devices in said space, if any, hold or are likely to be holding the data item.” It is clear from the plain language of claims 1 and 10 that claim 10 *does* express a further limitation on the recordkeeping of which mobile devices hold or are likely to be holding the data item in question.

The limitation “keeping a record on an on-going basis of which mobile devices . . . hold or are likely to be holding the data item,” recited in claim 1, finds support at page 45 of the Specification, where Appellants disclose that the server may keep a record of the devices to which it has served each item in an immediately preceding time window (FF 2). The

record may be supplemented by information about the device-to-device transfers of items, wherein the sending or receiving device can be required to inform the item server about such a transfer, including the time it was done (FF 3). The record may be further supplemented by having devices inform the server whenever they delete an item from cache (FF 4). Another approach would be to have each mobile device regularly report what feature items are present in its cache (FF 5).

Appellants' Specification thus clearly expresses ways in which its server may keep a record on an on-going basis of which mobile devices hold or are likely to be holding (i.e., have a chance of holding, as contrasted with having *no* chance of holding) the data item in question. When the claim is read in light of the Specification, we conclude that those skilled in the art would understand what is claimed. *Orthokinetics*, 806 F.2d at 1576. It is clear from the Specification that Appellants refer to a device being "likely" to hold a data item, rather than expressing certainty, because the mobile devices in question are held by individual visitors to the space, whose behavior is not controlled by the entity operating the space or by the service system. Such persons may unexpectedly delete data items from their mobile devices, or leave the exhibition. In the event that the mobile devices considered likely to hold the data item do not in fact hold it, or are no longer present at the location, the requesting device determines that it must ask for the item from the item server, which responds by sending back the item (FF 6).

Because we conclude that those skilled in the art would understand what is claimed in independent claims 1 and 16, Appellants have shown error in the Examiner's rejection, and we will not sustain the rejection of

claims 1-7, 9-13, 16-22, and 24-28 under 35 U.S.C. § 112, second paragraph.

#### CLAIMS 14, 15, 29, AND 30

As noted *supra*, we reverse the rejection of independent claims 1 and 16 under 35 U.S.C. § 112, second paragraph, because we conclude that the claim limitation “likely to be holding” is not indefinite. The Examiner includes claims 14, 15, 29, and 30 in the § 112 rejection, but does not discuss them separately from claims 1 and 16 or express any reason why these claims are indefinite. None of claims 14, 15, 29, or 30, however, contains the limitation “likely to be holding.” The Examiner has not stated any reason, then, why claims 14, 15, 29, and 30 should be considered indefinite under § 112.

Because the Examiner has failed to provide any reason why claims 14, 15, 29, and 30 should be considered indefinite, we conclude that the Examiner’s rejection is erroneous, and we will not sustain the rejection of claims 14, 15, 29, and 30 under § 112.

#### CONCLUSIONS OF LAW

Appellants have shown that the Examiner erred in concluding that the scope of the claimed invention is unascertainable due to the absence of a quantification of “likelihood” in the claimed phrase “likely to be holding.”

#### ORDER

The Examiner’s rejection of claims 1-7, 9-22, and 24-30 under 35 U.S.C. § 112, second paragraph, is reversed.

Appeal 2009-003130  
Application 10/635,925

REVERSED

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